

Project Management Principles

CS413 - Software Engineering Project Management

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Project Management Principles

- **Principles** for a profession serve as **foundational guidelines** for **strategy, decision making, and problem solving**
- The **principles** of project management are intended to **guide the behavior of people involved in projects**



Project Management Principles

- The PMI Code of Ethics and Professional Conduct is based on four values:
 - Responsibility
 - Respect
 - Fairness
 - Honesty
- 12 principles are aligned with these values



Project Management Principles

- Be a diligent, respectful, and caring steward
- Create a collaborative project team environment
- Effectively engage with stakeholders
- Focus on value



Project Management Principles

- Recognize, evaluate, and respond to system interactions
- Demonstrate leadership behaviors
- Tailor based on context
- Build quality into processes and deliverables



Project Management Principles

- Navigate complexity
- Optimize risk responses
- Embrace adaptability and resiliency
- Enable change to achieve the envisioned future state



STEWARDSHIP

Stewards act responsibly to carry out activities with integrity, care, and trustworthiness while maintaining compliance with internal and external guidelines. They demonstrate a broad commitment to financial, social, and environmental impacts of the projects they support.

- ▶ Stewardship encompasses responsibilities within and external to the organization.
- ▶ Stewardship includes:
 - Integrity,
 - Care,
 - Trustworthiness, and
 - Compliance.
- ▶ A holistic view of stewardship considers financial, social, technical, and sustainable environmental awareness.

Be a Diligent, Respectful, and Caring Steward



TEAM

Project teams are made up of individuals who wield diverse skills, knowledge, and experience. Project teams that work collaboratively can accomplish a shared objective more effectively and efficiently than individuals working on their own.

- ▶ Projects are delivered by project teams.
- ▶ Project teams work within organizational and professional cultures and guidelines, often establishing their own “local” culture.
- ▶ A collaborative project team environment facilitates:
 - Alignment with other organizational cultures and guidelines,
 - Individual and team learning and development, and
 - Optimal contributions to deliver desired outcomes.

Create a Collaborative Project Team Environment



STAKEHOLDERS

Engage stakeholders proactively and to the degree needed to contribute to project success and customer satisfaction.

- ▶ Stakeholders influence projects, performance, and outcomes.
- ▶ Project teams serve other stakeholders by engaging with them.
- ▶ Stakeholder engagement proactively advances value delivery.

Effectively Engage with Stakeholders



VALUE

Continually evaluate and adjust project alignment to business objectives and intended benefits and value.

- ▶ Value is the ultimate indicator of project success.
- ▶ Value can be realized throughout the project, at the end of the project, or after the project is complete.
- ▶ Value, and the benefits that contribute to value, can be defined in quantitative and/or qualitative terms.
- ▶ A focus on outcomes allows project teams to support the intended benefits that lead to value creation.
- ▶ Project teams evaluate progress and adapt to maximize the expected value.

Focus on Value



SYSTEMS THINKING

Recognize, evaluate, and respond to the dynamic circumstances within and surrounding the project in a holistic way to positively affect project performance.

- ▶ A project is a system of interdependent and interacting domains of activity.
- ▶ Systems thinking entails taking a holistic view of how project parts interact with each other and with external systems.
- ▶ Systems are constantly changing, requiring consistent attention to internal and external conditions.
- ▶ Being responsive to system interactions allows project teams to leverage positive outcomes.

Recognize, Evaluate, and Respond to System Interactions



LEADERSHIP

Demonstrate and adapt leadership behaviors to support individual and team needs.

- ▶ Effective leadership promotes project success and contributes to positive project outcomes.
- ▶ Any project team member can demonstrate leadership behaviors.
- ▶ Leadership is different than authority.
- ▶ Effective leaders adapt their style to the situation.
- ▶ Effective leaders recognize differences in motivation among project team members.
- ▶ Leaders demonstrate desired behavior in areas of honesty, integrity, and ethical conduct.

Demonstrate Leadership Behaviors



TAILORING

Design the project development approach based on the context of the project, its objectives, stakeholders, governance, and the environment using “just enough” process to achieve the desired outcome while maximizing value, managing cost, and enhancing speed.

- ▶ Each project is unique.
- ▶ Project success is based on adapting to the unique context of the project to determine the most appropriate methods of producing the desired outcomes.
- ▶ Tailoring the approach is iterative, and therefore is a continuous process throughout the project.

Tailor Based on Context



QUALITY

Maintain a focus on quality that produces deliverables that meet project objectives and align to the needs, uses, and acceptance requirements set forth by relevant stakeholders.

- ▶ Project quality entails satisfying stakeholders' expectations and fulfilling project and product requirements.
- ▶ Quality focuses on meeting acceptance criteria for deliverables.
- ▶ Project quality entails ensuring project processes are appropriate and as effective as possible.

Build Quality into Processes and Deliverables



COMPLEXITY

Continually evaluate and navigate project complexity so that approaches and plans enable the project team to successfully navigate the project life cycle.

- ▶ Complexity is the result of human behavior, system interactions, uncertainty, and ambiguity.
- ▶ Complexity can emerge at any point during the project.
- ▶ Complexity can be introduced by events or conditions that affect value, scope, communications, stakeholders, risk, and technological innovation.
- ▶ Project teams can stay vigilant in identifying elements of complexity and use a variety of methods to reduce the amount or impact of complexity.

Navigate Complexity



RISK

Continually evaluate exposure to risk, both opportunities and threats, to maximize positive impacts and minimize negative impacts to the project and its outcomes.

- ▶ Individual and overall risks can impact projects.
- ▶ Risks can be positive (opportunities) or negative (threats).
- ▶ Risks are addressed continually throughout the project.
- ▶ An organization's risk attitude, appetite, and threshold influence how risk is addressed.
- ▶ Risk responses should be:
 - Appropriate for the significance of the risk,
 - Cost effective,
 - Realistic within the project context,
 - Agreed to by relevant stakeholders, and
 - Owned by a responsible person.

Optimize Risk Responses



ADAPTABILITY AND RESILIENCY

Build adaptability and resiliency into the organization's and project team's approaches to help the project accommodate change, recover from setbacks, and advance the work of the project.

- ▶ Adaptability is the ability to respond to changing conditions.
- ▶ Resiliency is the ability to absorb impacts and to recover quickly from a setback or failure.
- ▶ A focus on outcomes rather than outputs facilitates adaptability.

Embrace Adaptability and Resiliency



CHANGE

Prepare those impacted for the adoption and sustainment of new and different behaviors and processes required for the transition from the current state to the intended future state created by the project outcomes.

- ▶ A structured approach to change helps individuals, groups, and the organization transition from the current state to a future desired state.
- ▶ Change can originate from internal influences or external sources.
- ▶ Enabling change can be challenging as not all stakeholders embrace change.
- ▶ Attempting too much change in a short time can lead to change fatigue and/or resistance.
- ▶ Stakeholder engagement and motivational approaches assist in change adoption.

Enable Change to Achieve the Envisioned Future State



References

- Project Management Body of Knowledge (PMBOK) - 7th Edition

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